

REMARKS

Claims 1-28 are pending. No claims stand allowed. Claims 17, 23 and 28 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. Please note that the amendment to claim 17 is supported by the description on page 23, line 22 to page 24, line 2 of the specification. New claims 29 and 30 also particularly point out and distinctly claim subject matter regarded as the invention, which are supported by the description on page 14 line 19 to page 15, line 4 of the specification.

The 35 U.S.C. § 112 Rejection

Claims 23 and 28 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter the applicant regards as the invention.

Claim 23, as amended, recites “said second processor” in line 15, referring to “a second processor” in line 9, and thus satisfies the antecedent basis requirement. Claim 28 has been amended to recite “a control adapter” and “a service adapter” which provide sufficient antecedent basis to the limitations in the claim.

With this amendment it is respectfully submitted the claims satisfy the statutory requirements. Accordingly, withdrawal of the 35 U.S.C. § 112, second paragraph, rejection is respectfully requested.

The 35 U.S.C. § 102 Rejection

Claim 28 stands rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by McHann, Jr., U.S. Patent 5,991,806 (hereinafter referred to as McHann). This rejection is respectfully traversed.

Claim 28 has been amended so as to recite substantially the same limitations as claim 17 (as amended). Since claim 17 does not stand rejected under §102, it is respectfully requested that the §102(e) rejection based on McHann be withdrawn at least for this reason. The patentability of claim 28 under §103 will be further discussed below.

The 35 U.S.C. § 103 Rejection

Claims 1-16 and 20-27 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over McHann in view of Bracho et al., U. S. Patent No. 5,873,084 (hereinafter referred to as Bracho). Claims 17-19 also stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over McHann. This rejection is respectfully traversed.

A. Claim 1

A method defined in claim 1 includes publishing the network management information as network management events on an information bus, subscribing the events at a monitor interface, receiving the events at the interface, converting the events into umbrella management system information useable by the umbrella management system,

and communicating the umbrella management information to the umbrella management system. Thus, the claimed method does not simply send and receive events at the interface, but fully employs the publish/subscribe scheme for transmitting and receiving the events.

McHann discloses a message router **104** (i.e., system controller or server **810**) for the computer system **800**, as shown in Fig. 8. The system controller/server **810** receives messages in different message formats from various components and devices in the system **800**, such as a scanning system **814** and a SMART disk drive **822**, analyzes and parses the messages to identify the specific format used, and converts the messages in a common format (column 10, lines 8-14, column 12, lines 15-21). The server **810** (or event-monitor application **1100**) sends the formatted messages or events over the network **802** to a selected network management system (column 12, lines 27-32). This allows each system component or device to use its own message format without modifying or installing software, yet utilizes information contained in such messages for various management purposes. However, as the Examiner has acknowledged, McHann does not teach or suggest publishing and subscribing to network management information events.

Bracho teaches a basic publishing/subscribing system in which a publisher and a subscriber are connected to a network through a hub (column 3, line 65 to column 4, line 4). Such a hub is also referred to as an information broker or broker, as is well known to those of ordinary skill in the art. In order to employ a publishing/subscribing scheme, not only a hub or broker intermediates published events to subscribers, but also the publishers

and subscribers must use the predefined interface procedures in accordance with an Application Programming Interface (API) (column 2, lines 25-30) and agree in advance on a predetermined set of event types (column 4, lines 53-56). Furthermore, in order for the events to make sense, the publishers and subscribers need to understand each other, and typically a standard specification language is used to define events (column 5, lines 39-43).

Thus, if Bracho's teachings should be used to modify McHann's system to employ publishing/subscribing scheme, as the Examiner alleges, all components and devices in McHann's system **800** and the system controller/server **810** must use the predefined interface procedures in accordance with an API, agree in advance on a predetermined set of event types, and use a standard specification language to define events or messages. However, predefining interface procedure and agreeing event types between each system device and the server **810** would destroy all advantages of McHann's system, in which the system components and devices can simply send messages in a different format to the system controller/server **810**, as discussed above.

Accordingly, even though Bracho teaches a publishing/subscribing system, those of ordinary skill in the art would not modify McHann with Bracho's teachings or combine the two systems.

Furthermore, McHann does not address any "legacy software" problem in common with Bracho. Even though incompatibility of message formats might have

resulted from “legacy software” of some devices in McHann’s system **800**, such a problem has been fully solved with the dynamic system controller/server **810** by analyzing and parsing messages and converting into a common format, as discussed above. Also, McHann’s solution does not require modifying existing software of the system devices or databases, since they remain sending the messages in their own formats. In addition, there is no showing of alleged improvement in effectiveness by combining publishing/subscribing scheme, since the system **800** is already fully effectively working by converting different message format into a common format by the server **810** in order to use such messages for network maintenance.

Therefore, there is no motivation to incorporating a publishing/subscribing scheme of Bracho to McHann’s system.

Accordingly, it is respectfully requested that the rejection of the claim based on McHann and Bracho be withdrawn.

B. Claims 20, 23-24, and 27

A monitor interface defined in claim 20 includes an adapter that subscribes to and captures network management events off of the information bus, a converter that formats the events into umbrella management system information, and a forwarder that conveys the umbrella management information to the umbrella management system. Similarly, a data communication network defined in claim 23, as amended, includes an access database adapter, a control adapter, and a service adapter all of which publish events to

an information bus, a monitor interface adapter which subscribes to and captures the published events, a converter, and a forwarder. Claim 24 defines a monitor interface in the “means plus function” form. Claim 27 defines a program storage device and includes the same limitations as that of claim 1.

Thus, the same arguments discussed in section A above are equally applicable here. Accordingly, it is respectfully requested that the rejection of these claims based on McHann and Bracho be withdrawn at least for the same reasons discussed above.

C. Claim 17 and Claim 28

Claim 17 defines a method for managing a data communications network. The claimed method includes starting a master daemon, starting a control adapter with the master daemon, and restarting the control adapter with the master daemon should the control adapter ever stop. Furthermore, the master daemon is in a standby mode monitoring the control adapter until a failure of the control adapter occurs, as amended. Thus, the claimed method does not only restart the control adapter if it fails, but also gives a specific role to the master daemon as it starts the control adapter, monitors the control adapter until the control adapter stops, and then restart the control adapter if the control adapter fails. Claim 28 also include the same limitations as claim 17.

Although the Examiner acknowledges that McHann does not teach restarting a failed application, the Examiner has taken “official notice” that restarting a failed

application module is well known in the art. The applicant respectfully traverses the Examiners assertion with this amendment.

In order to take official notice, facts outside of the record must be capable of instant and unquestionable demonstration as being “well-known” in the art. *In re Ahlert*, 424 F.2d 1088, 165 USPQ 418 (CCPA 1970). Here, simply restarting a failed application module might be well-known in the art, for example, by manually rebooting the application module. However, a specific manner of restarting, such as how to detect a failure, how and with what to restart the failed application module, cannot be “capable of instant and unquestionable demonstration as being “well-known” without any explanation or description. The amended claim more clearly recites a specific procedure that the control adapter is started with the master daemon, monitored by the master daemon which is in standby mode until the control adapter fails, and restarted with the mater daemon should it ever stop. The claimed features are neither “well-known” in the art nor obvious from prior art references.

Accordingly, it is respectfully requested that the rejection of the claims based on McHann and official notice be withdrawn.

In view of the foregoing, it is respectfully asserted that the independent claims are now in condition for allowance.

D. Dependent Claims

Claims 2-16 depend from claim 1 and thus include the limitations of claim 1. Similarly, claims 18-19 depend from claim 17, claims 21-22 depend from claim 20, and claim 25-26 depend from 24, and thus each claim include the limitations of the corresponding independent claim. Thus, the argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable at least for the same reason.

In addition, regarding dependent claims 18-19, it should be noted that they include publishing/subscribing features and thus discussion with respect to claim 1 set forth above is also applicable to these claims.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Request for Allowance

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Respectfully submitted,
THELEN REID & PRIEST, LLP



David B. Ritchie
Reg. No. 31,562

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Thelen Reid & Priest LLP
P.O. Box 640640
San Jose, CA 95164-0640
(408) 292-5800

MARKED-UP VERSION OF CLAIMS SHOWING CHANGES MADE

17. (Once Amended) A method for managing a data communications network comprising:

- starting a network management application program;
- starting an access database adapter in communication with said network management application program;
- starting a master daemon in communication with said access database adapter;
- starting a control adapter with said master daemon;
- monitoring said control adapter with said master daemon until said control adapter stops;
- restarting said control adapter with said master daemon should said control adapter ever stop;
- starting at least one service with said control adapter, said service including a service adapter in communication with said control adapter and said access database adapter; and
- starting a monitor interface adapter, said monitor interface adapter in communication with said control adapter, said service adapter, said access database adapter and an umbrella management system.

23. (Once Amended) A data communications network comprising:

- a first processor including:
 - a network management application,

an access database adapter in communication with said network management application and an information bus, said access database adapter publishing events onto the information bus, and

a database in communication with said network management application and said access database adapter;

a second processor including:

a control adapter in communication with said information bus, said control adapter publishing events onto the information bus,

a service adapter in communication with said information bus and said control adapter, said service adapter started by said control adapter service, said service adapter publishing events onto the information bus, and

at least one service running on said second processor, said service in communication with said service adapter; and

a monitor interface including:

a monitor interface adapter in communication with said information bus, said monitor interface adapter subscribing to and capturing events published by said access database adapter, said control adapter and said service adapter,

a converter in communication with said monitor interface adapter, said converter converting said events into umbrella management system information, and

a forwarder in communication with said converter, said forwarder conveying said network management information to an umbrella management system.

28. (Once Amended) A program storage device readable by a machine tangibly embodying a program of instructions executable by the machine to perform a method for managing a data communications network comprising:

starting a network management application program;

starting an access database adapter in communication with said network management application program;

starting a master daemon in communication with said access database adapter;

starting a control adapter with said master daemon;

monitoring said control adapter with said master daemon until said control adapter stops;

restarting said control adapter with said master daemon should said control adapter ever stop;

starting at least one service with said control adapter, said service including a service adapter in communication with said control adapter and said access database adapter; and

starting a monitor interface adapter, said monitor interface in communication with said control adapter, said service adapter, said access database adapter and an umbrella management system.

29. (New) A method in accordance with claim 17, wherein said master daemon is defined as a parent process and said control adapter is defined as a child process of the master daemon.

30. (New) A method in accordance with claim 29, wherein said master daemon includes an application significantly simpler than said control adapter.